Figures and Tables

Table 1. Sequence homology of the proposed peptide and prion peptides of mammals.

SEQ ID NO 1 Allostatin 1	His	Gly	Val	Ser	Gly	Trp	Gly	Gln		His	Gly		Thr	His	Gly
SEQ ID NO 2 PrP1 Trast f 80-91	His	Gly	Gly		Gly	Trp	Gly	Gln	Pro	His	Gly			Gly	Gly
SEQ ID NO 3 PrP1 Trast f 96-108	His	Gly	Gly	Gly	Gly	Trp	Gly	Gln		Gly	Gly		Thr	His	Gly
SEQ ID NO 4 PrP2 Trast f 64-75	His	Gly	Gly		Gly	Trp	Gly	Gln	Pro	His	Val			Gly	Gly
SEQ ID NO 5 PrP2 Trast f 72-83	His	Val	Gly		Gly	Trp	Gly	Gln	Pro	His	Gly			Gly	Gly
SEQ ID NO 6 PrP2 Trast f 88-100	His	Gly	Gly	Gly	Gly	Trp	Gly	Gln		Gly	Gly		Thr	His	Gly
SEQ ID NO 7 Prio bovin f 96-108	His	Gly	Gly	Gly	Gly	Trp	Gly	Gln		Gly	Gly		Thr	His	Gly
SEQ ID NO 8 Prio bovin f 64-75	His	Gly	Gly		Gly	Trp	Gly	Gln	Pro	His	Gly			Gly	Gly
SEQ ID NO 9 PrP Human f 52-66	Gln	Gly	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly
SEQ ID NO10 PrP Human f 69-83	His	Gly	Gly	Gly		Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly
SEQ ID NO11 PrP Human f 85-97	His	Gly	Gly	Gly		Trp	Gly	Gln		Gly	Gly	Gly	Thr	His	Ser
consensus-sequence						Trp	Gly	Gln							

Table 2. Comparison of aminoacid sequences of aaloferon-1 and allostatin-1.

Positions	1	2	3	4	5	6	7	8	9	10	11	12	13
SEQ ID NO 1 Allostatin 1	His	Gly	Val	Ser	Gly	Trp	Gly	Gln	His	Gly	Thr	His	Gly
SEQ ID NO 2 Alloferon 1	His	Gly	Val	Ser	Gly	His	Gly	Gln	His	Gly	Val	His	Gly

Table 3. Comparison of general structural formula of alloferon and allostatin.

Alloferons	X_1	His	Gly	X_2	His	Gly	Val	X_3
Allostatins	X_1	Trp	Gly	Gln	X_2			

Table 4. Combined action of cyclophosphamide and allostatin onto ability of tumor cells of P388D1 line to form daughter clones.

Preparation	Concentration	Number of clones in a single well			Average number of clones
		1	2	3	
Control	–	16	16	12	14.7 ± 1.3
Cyclophos-phamid	1.5 mcg/ml	12	19	14	15.0 ± 2.1
Allostatin	0.1 mcg/ml	21	20	14	18.3 ± 2.2
	1 mcg/ml	14	19	19	17.3 ± 1.7
	10 mcg/ml	16	15	21	17.3 ± 1.9
Cyclophos-phamid + allostatin	1550 ng/ml + 0.1 mcg/ml	8	8	9	8.7 ± 0.3
	1550 ng/ml + 1 mcg/ml	6	6	10	7.3 ± 1.3
	1550 ng/ml + 10 mcg/ml	3	4	4	3.7 ± 0.3

Table 5. Antiviral activity of allostatin and alloferon towards A/Aichi/2/68 (H3N2) influenza virus on the model of lethal influenzal infection of white mice.

Preparation	Virus dosage, LD_{50}	Death-rate of animals (dead/infected, animals)	Percentage of death, %	Death-rate for the sum of two virus doses, %
Control	30	10/10	100	90
	3	8/10	80	
Alloferon	30	6/10	60	50**
	3	4/10	40	
Allostatin	30	7/10	70	50**
	3	3/10	30	

** Probability of difference from control $P<0.01$

Fig. 1. Final stage of allostatin-1 purification by HPLC method

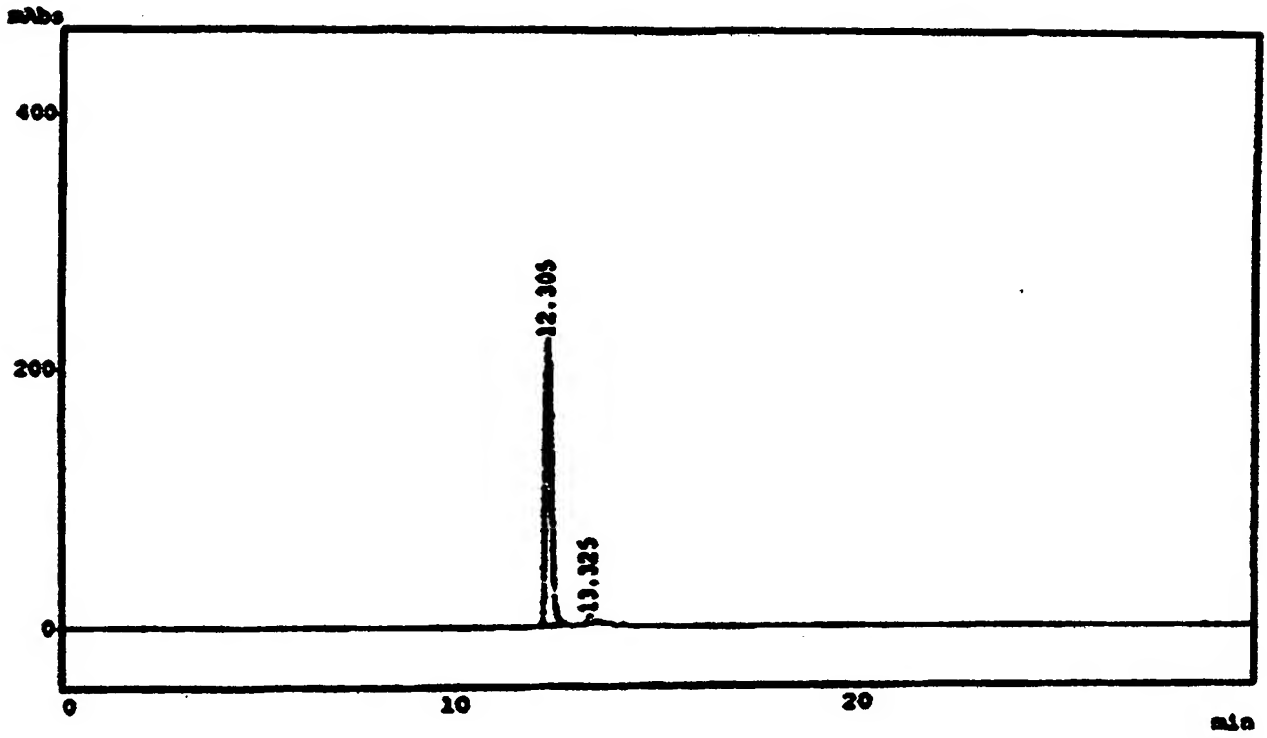


Fig. 2. Mass-spectrum of allostatin-1

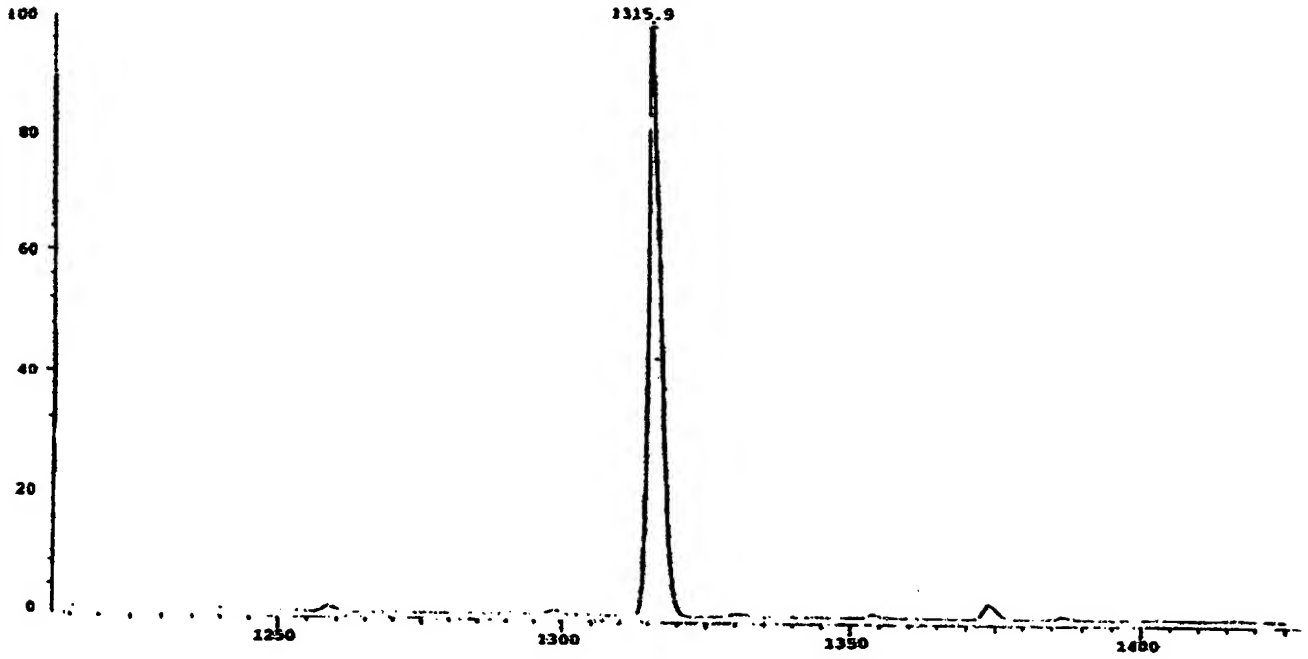


Fig. 3. *In vitro* influence of allostatin and alloferon onto proliferation of tumor cells of P388D1 line.

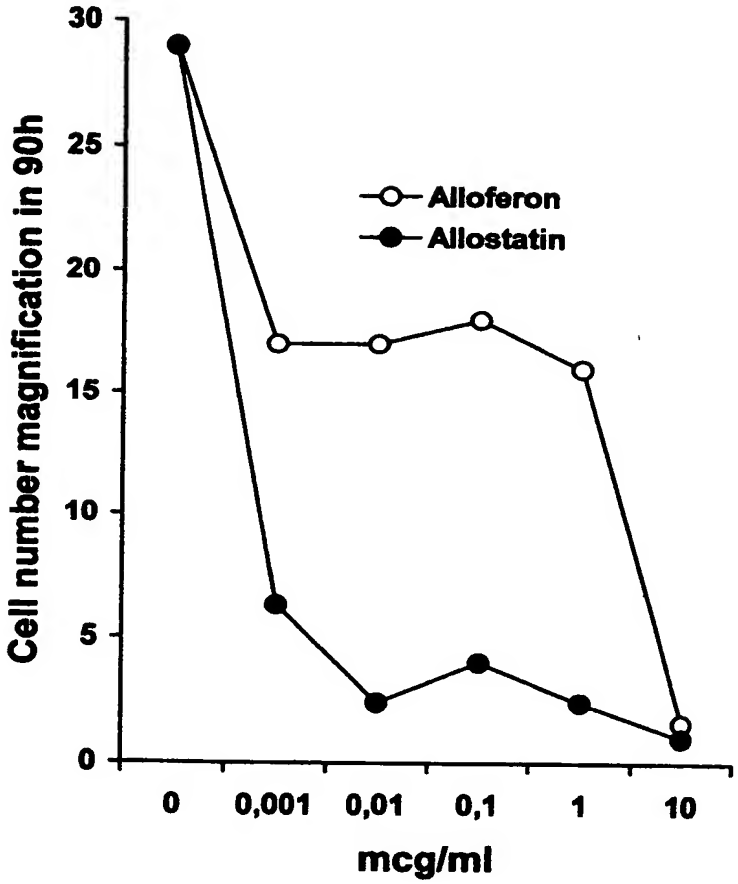
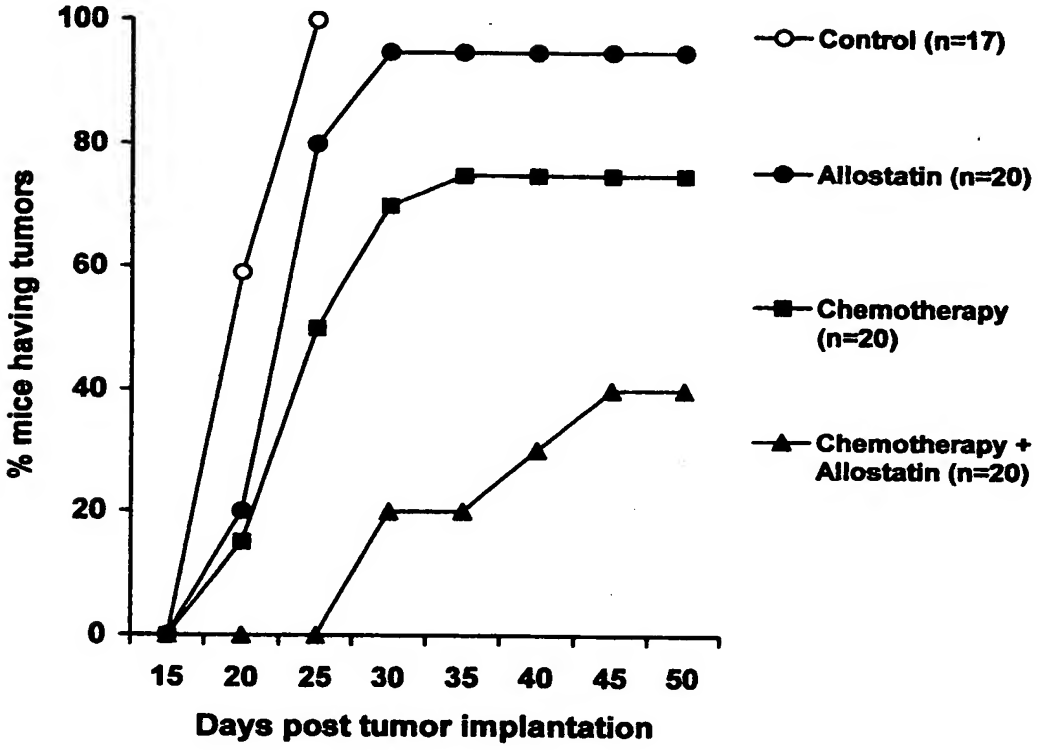


Fig. 4. Tumor growth suppression of DBA line of mice, implanted by cells of syngenic lymphoid neoplasm R388, after combined administration of cytostatics (chemotherapy) and allostatin.



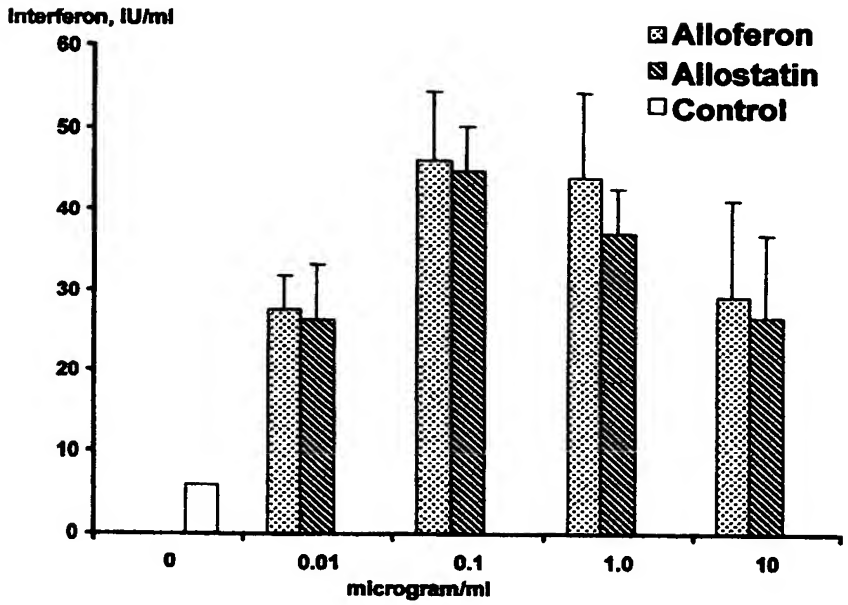


Figure 5. In vitro production of interferon by human leucocytes in the presence of alloferon and allostatin.